

**NEW RECORD AND HOSTS FOR GENUS NR.
PHYCOIDELLA SAETHER (DIPTERA:
CHIRONOMIDAE:ORTHOCLADIINAE)¹**

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Gordon, Swan and Paterson (1978) recorded specimens of a genus nr. *Phycoidella* Saether (1971) from between the demibranchs of *Anodonta cataracta* Say from New Brunswick, Canada. These larvae appeared to be in the first instar. Efforts to rear these or find possible later instars outside the host mollusc have, to date, been unsuccessful.

Recently Mr. Malcolm F. Vidrine of the University of Southwestern Louisiana, while collecting parasitic *Unionicola* mites from Mollusca, found larvae that appeared to be the above species between the demibranchs, and between the demibranchs and the body of several genera and species of Unionidae. These unionids were collected from 12-mile Creek at LA. Rt. 1045, St. Helena Parish, Louisiana, by Mr. Vidrine and his family. Thanks to the kindness of Dr. Paterson, who sent me larvae found in *A. cataracta* from Lake Morice, N.B., I was able to confirm the identity of the Louisiana specimens with those from New Brunswick. I am also indebted to Mr. Vidrine and Mr. D.J. Bereza (ANSP) for data on the creek as well as the identification of the unionid species involved, and to the Department of Limnology and Ecology, Acad. Nat. Sci. Phila. for support from its research funds.

The presence of these larvae in Louisiana appears to represent a considerable jump in distribution, but this may be more apparent than real. These larvae are very small (about 0.75 mm) and would not be readily noticed by anyone not specifically searching for parasites between the demibranchs of the mollusks. They very likely occur at many localities between New Brunswick and Louisiana.

Habitat — 12-mile Creek is 15-20' wide and 0.5-3.0' deep. The water is clear and cool and the bottom is sandy with medium to fine gravel. The water flow was moderate. There are extensive beds of *Vallisneria* sp. with mud and sand. The highest concentrations of mussels were in the *Vallisneria* beds.

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Hosts — The larvae of genus nr. *Phycoidella* were found between the demibranchs of the following Unionidae:

Anodonta imbecillis Say

Elliptio beadtiana (Lea)

Fusconaia sp.

Lampsilus claibornensis (Lea) (= *straminea*)

Villosa vibex (Conrad)

Strophitus subvexus? (Conrad) was also found, but the single specimen collected was not infested.

Larva — The presumed instar I larva has a body length (caudal head margin - apex of A.X) of about 790μ . The head (Fig. 1) is 85μ long by 51μ wide. In dorsal view the sides are parallel. The head depth is 35μ . The first antennal segment is about 8.5μ long, the apical segments (apparently 3) are not clearly discernible. The blade appears as long as the flagellar segments. The mandible (Fig. 2) is about 25μ long and possesses a comblike row of preapical setae and a long apical tooth. It is somewhat suggestive of that found on some species of *Psectrocladius*. The ventromentum (Fig. 3) appears clear with a small number of dorsomental teeth on each side. The anterior prolegs (Fig. 1) possess 4-5 large apical claws and some smaller claws on the shaft.

There were up to 25 larvae per demibranch pair.



Figures 1-3. Genus nr. *Phycoidella*. Fig. 1 - larval head and first thoracic segment, lateral; Fig. 2 - larval mandible; Fig. 3 - larval mentum.

LITERATURE CITED

- Gordon, M.H., B.K. Swan and C.G. Paterson. 1978. *Baeoctenus bicolor* (Diptera: Chironomidae) parasitic in unionid bivalve molluscs and notes on other chironomid-bivalve associations. J. Fish. Res. Board Can. 35:154-157.
- Saether, O.A. 1971. Four new and unusual Chironomidae (Diptera). Can. Ent. 103:1799-1827.